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ABSTRACT

The Human Sexuality for the Mentally Retarded program sought to provide cognitive awareness of human sexuality for mentally retarded trainable residents (5 to 21 years old) as well as inservice staff training regarding attitudes and cognitive awareness changes. Cognitive awareness training focused on body parts, discrimination of the sexes, puberty changes, menstrual hygiene, social behaviors, and appropriate behaviors. Inappropriate behaviors in residents were observed and individual behavior modification programs were carried out for nine residents. Inservice training involved 456 participants. Climate observation or questionnaire formats were used to measure the program's effectiveness. Resulting data are presented for each activity, indicating a significant increase in resident cognitive awareness of human sexuality, a reduction in inappropriate sexual behaviors of residents, a positive change in attitudes of staff, and an understanding of much higher degrees of sexually inappropriate behaviors by residents in unstructured settings. The project was found to be exportable, and replication considerations are given. (CL)

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HUMAN SEXUALITY FOR THE MENTALLY RETARDED

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HUMAN SEXUALITY FOR THE
MENTALLY RETARDED

ABSTRACT

Human Sexuality for the mentally retarded was an ESEA Title IV-C federally funded program designed to increase sexual cognitive awareness, and modify the inappropriate sexual behaviors of mentally retarded residents between the ages of five and twenty-one. Additionally, the program was designed to modify staff attitudes and awareness regarding sexuality issues with retarded individuals.

Programming consisted of specially designed curriculum in human sexuality, behavior modification structures, workshops, and climate assessments. The results indicated an overwhelming increase in resident cognitive awareness of human sexuality; a reduction in inappropriate sexual behaviors of residents; a positive shift in attitudes of staff and an understanding of much higher degrees of sexually inappropriate behaviors by residents remaining in unstructured milieus.

A complete set of curriculum, materials, and guidelines are available at a minimum charge, in addition to this summary for program development in similar residential climates.

LIST OF TABLES

Table 1 Evaluation Design 13

Table 2 Table of Observer Reliability Measures. 15

Table 3 Body Parts. 18

Table 4 Physical Characteristics. 19

Table 5 Puberty Changes 20

Table 6 Menstrual Hygiene Program 24

Table 7 Social Behaviors. 25

Table 8 Appropriate Time and Place for Given Behaviors. 26

Table 9 Data Summary of Cognitive Awareness Changes 27

Table 10 Workshops During Year 1980 and 1981 31

Table 11 Spin Off from In-Service. 32

Table 12 Sex Education Workshop, Pretest and Posttest Results. 33

Table 13 Comparisons of Mean Responses on Pretest and Posttest 36

Table 14 Sex In-Service Open-Ended Comments. 38

Table 15 Behavioral Climate of Sexually Inappropriate Behaviors/ Males 41

Table 16 Behavioral Climate of Sexually Inappropriate Behaviors/ Females 41a

Table 17 Comparisons of Sexually Inappropriate Behaviors as a Result of Intervention and Non-Intervention 44

Table 18 Statistics Comparing Frequency of Sexually Inappropriate Behaviors Between Intervention and Non-Intervention 47

LIST OF ILLUSTRATIONS

Illus. 1 Reversal Design Graphs of Behavior Intervention/Females . . . 28

Illus. 2 Reversal Design Graphs of Behavior Intervention/Males 29

Illus. 3 Reversal Design Graphs of Behavior Intervention/Males 30

Illus. 4 Behavioral Climates of Sexually Inappropriate Males 42

Illus. 5 Behavioral Climates of Sexually Inappropriate Females 43

Illus. 6 Comparisons of Sexually Inappropriate Behaviors as a Result of Intervention and Non-Intervention 45

Illus. 7 Comparisons of Sexually Inappropriate Behaviors as a Result of Intervention and Non-Intervention 46

TABLE OF CONTENTS

Abstract i

I. Effectiveness/Success

A. Purpose and Objectives 1

B. Program Activities 5

C. Evaluation Design. 12

D. Results and Analysis 17

II. Exportability

A. Educational Significance 50

B. Target Population. 51

C. Staffing and Training Requirements 51

D. Materials, Equipment and Facilities. 52

E. Minimum Adoption Requirements. 53

F. Replication Costs. 54

G. Special Problems 55

Appendices 57

I. EFFECTIVENESS/SUCCESS

PURPOSE AND OBJECTIVES

1. Major Purpose

The Project, Human Sexuality for the Mentally Retarded, is an attempt by educators at the Redfield State Hospital and School to modify the sexual behavior of the mentally retarded. Students that are selected for participation are residents at the school, between the ages of five and twenty-one years and may, at some future date, be suited for living outside the facilities of the Redfield State Hospital and School.

This application for validation is written to specify the data used in attainment of objectives specified in the Handbook for Validation, Sharing Educational Success. The format used will be consistent with the form specified by DHEW Office of Education.

2. General Goals: (behavioral objectives accompany Program Activities, Part B.)

(I) To establish a baseline in the cognitive awareness of human sexuality for trainable residents in the Redfield State Hospital and to provide programming for measureable increases in resident understanding of human sexuality. Specific tasks will be programmed until the 90% accuracy level is reached by participants. 60% of all students will meet criteria of 90% correct on all items.

(II) To establish a baseline in observed inappropriate sexual behaviors of trainable residents and provide for a system of diagnosis and behavioral management to substantially reduce or eliminate those same inappropriate behaviors.

(III) To provide for staff in-service training regarding attitudes and cognitive awareness changes; and to provide for training of staff workers involved in accomplishing the general goals.

(IV) To provide for succinct behavioral climate description of student sexual behavior (e.g. time, location, activities) to facilitate more accurate programming of sexual behavioral changes. Measureable changes after intervention will be assessed at the .05 level.

3. Interrelationship

The Instructor and Project Director recognized at the onset of Project Activities, the necessity and the interdependence of program goals. In their attempt to provide for a wholistic impact on the inappropriate sexual behaviors of students, they identified the importance of informing staff, impacting positively their philosophy and behavior and encouraging their committment to participate in the Program (General Goals III and IV). Consistency in follow through for General Goals I and II is dependent on Goals III and IV.

Additionally, Goal II (modifying inappropriate behaviors) is dependent on first establishing a cognitive awareness of appropriate behaviors and human sexuality (Goal I).

Finally, modification of inappropriate behaviors (Goal II) is dependent on staff knowledge and awareness of the climates (times, locations, activities and association relationships) that enhance the frequency of selected inappropriate sexual behaviors (Goal IV) and therefore the accuracy of programming for sexual behavioral changes.

4. Deleted and Unanticipated Objectives

After completion of Project Year 1980-1981, General Goal V was deleted. It was concluded that the data gained during this year would remain accurate for the following Project Year. Also, General Goals III and IV were combined forming a single goal. The current General Goals for 1981-1982 are as follows:

I. To establish a baseline in the cognitive awareness of human sexuality for trainable residents in the Redfield State School and to provide programming for measureable increases in resident understanding of human sexuality. (Participants engaging in selected learning activities will achieve 90% accuracy in retests before moving to the next learning task. For a summary of learning tasks, please consult Final Evaluation Report 1980-1981.)

II. To establish a baseline in observed inappropriate sexual behaviors of trainable residents and provide for a system of diagnosis and behavioral management to substantially reduce or eliminate those same inappropriate behaviors. (The term "appropriate" is evaluated in terms of the concepts of time and place through staff input and administrative legislation.) (Participants engaging in the behavior modification program will achieve a 90% reduction in inappropriate behaviors before the program completion.)

III. To provide for staff in-service training regarding attitudes and cognitive awareness changes; and to provide for the training of staff workers involved in expanding the general goals and objectives to other appropriate units.

Other unanticipated changes were made in program activities. In general Goal I (Cognitive Awareness) materials had to be continuously modified or created (enlarged and simplified) to provide for cognitive grasping of the concepts by students. Additionally, the style and format of presentation had to be individualized (mainly slowed down) to ensure the students' grasp of the concepts. In some cases, as the program expanded from the Educational Unit to other units (where students possessed both a lower mental age and lower functioning capabilities) more focus was shifted to functional needs in lieu of cognitive awareness and associative feeling assessment.

In the modification of inappropriate behaviors (Goal II) "over correction" became the initial and highly effective means of reducing "inappropriate hand placement". However, institutional policy deemed this technique "punishing" and the Project personnel shifted technique use to "activity substitution".

Finally, it was felt by Project Staff that the General Goals still did not comprehensively provide for safe and effective sexual adjustment for

students once placed outside the Redfield State Hospital and School. The issue of student sexual exploitation by others needed to be addressed. Therefore, efforts were increased to develop awareness skills in residents regarding the identification of inappropriate behaviors of others as well as selected defensive and assertive skills. Primary activities included appropriate matching of behavioral pictures to environments and to self-selected role playing activities to provide students with experiential understanding of the sexually inappropriate behaviors of others, and observation of students in environments outside the Redfield State Hospital and School.

B. PROGRAM ACTIVITIES

(For purposes of clarification, program activities will be presented consistent with the structure of behavioral objectives contained within the Project.)

1. Cognitive Awareness

a. Body Parts Program

This program was designed to facilitate subject discrimination of body parts. Materials used were created by staff personnel. It was divided into three phases: 1) teaching discrimination by touching body parts on self; 2) teaching discrimination by pointing or touching body parts on dolls; 3) teaching discrimination by pointing or touching body parts on pictures. Instruction on each phase consisted of the following segments: 1) modeling; 2) physical and verbal segments; 3) tests and instruction. The criterion base-line and post test performance was set at 90% correct (out of the total number of required responses) on discrimination and labeling. There were 20 participants. (Pre/Post test is illustrated in Appendix A.)

b. Sex Discrimination: (man, woman, boy and girl with clothing)

The purpose of this program was to assess the participants' skills in discrimination of sex with clothed representational figures. Visual materials were created by staff personnel. Apparel features upon which clients discriminated sex included: wearing apparel, jewelry, make-up and hair styles generally associated with each sex. Twelve pictures, depicting various combinations of apparel variables were selected for use during pre and post testing. Criterion was set at 90% accuracy in five of five sessions (6 trials per session).

c. Puberty Changes

The purpose of this program was to teach the participants to recognize their own bodies and the changes that occurred during growth as well as the growth changes in others. Instruction consisted of pretesting or baselining followed by modeling, prompting, instructing (using unclothed dolls) and post test segments. Criterion was set at 90% accuracy in five of five sessions (three trials per session). There were six participants in this behavioral objective. Materials used were modifications of materials used in sex education classes for normal children.

d. Menstrual Hygiene

The menstrual hygiene program was designed to teach independence during the time of a female's menses. A copy of the program was given to dorm parents (with instructions and training) and teachers to aid in instruction and transfer of skills. The program was taught utilizing forward chaining procedures and was divided into two phases: putting on the pad and removing the pad. Criterion was set at 90% accuracy for all steps of the program for three consecutive sessions. There were seventeen participants.

e. Social Behaviors

The purpose of this program was to teach the client socially appropriate behaviors which would make his/her movements in the community more acceptable. Role playing techniques in the classroom were utilized. To increase generalization, foster grandparents, teachers and dorm parents were trained and made aware of opportunities to enhance participant

learning of activities. Criterion was set at using a minimum of five behaviors per day for a period of 20 consecutive school days. The participants were instructed and successfully completed pre and post testing. (Three participants).

f. Appropriate Time and Place for Given Behaviors

The purpose of this program was to help clients acquire skills which should facilitate appropriate adult functioning in less restrictive school, group home and community environments. This was accomplished by utilizing photographs and pictures of behaviors and environments. The criterion was set at 90% accuracy in nine of ten sessions (one trial per session). The participant was required to sort private and public environments; private and public behaviors and match private behaviors to private environments and public behaviors to public environments. There were twelve participants.

2. Modification of Inappropriate Behaviors

The purpose of this program was to receive referred participants from staff members at the Redfield State Hospital and School who continuously engaged in high incidences of inappropriate sexual behaviors. (Touching themselves or others inappropriately, masturbation, fondling, etc.) The program instructor observed the participants in various environments in order to establish a baseline of frequency of inappropriate behaviors. Once this was accomplished, individual schedules of effective reinforcers and appropriate alternative activities for reciprocal inhibition were established.

The instructor, as well as significant other staff persons (dorm parents, teachers, and foster grandparents) applied the modification

techniques with continued frequency tallying. As the behavior decreased, re-baselining occurred to measure permanence of association and transfer of learned appropriate behaviors. This process was repeated if solid associations with respect to behavior were not evident. Observations consisted of five minute periods out of each hour in the eight hour day, excluding weekends. Three females and six males participated in the program. The Behavioral Checklist is listed in Appendix B.

3. In-Service

Thirty-one hours of in-service workshops were held for both new and existing staff members. The workshops were directed by both the Project Director and Project Instructor. Topics covered included behavior modification techniques, values clarification with respect to human sexuality for the retarded, films and discussion of techniques in establishing cognitive awareness of human sexuality for residents. Pre and post test evaluations (Likert scale) and an open-ended assessment of participant comments were provided. There were a total of 273 participants that were assessed. (A grand total of 456 participants appeared in workshops on and off the Redfield site.) Sixteen hours of in-service workshop experiences were held off-site. Off-site experiences occurred with the Madison Adjustment Training Center, Vermillion Adjustment Training Center, SD Community Humanities Panel, Huron Adjustment Training Center, Lutheran Social Services-Sioux Falls and State Nursing Convention-Pierre. Questionnaires are illustrated in Appendix C.

4. Behavioral Climate Study and Intervention

Trained staff person(s) observed and counted the frequency of inappropriate participant behavior for five minutes of every thirty minutes for each day (7 days total), beginning February 17, 1981 and ending February 23, 1981. Ten males and ten females were referred and selected for the study by staff members because of the high incidence of their sexually inappropriate behaviors. Inappropriate sexual behaviors were operationally defined as: hands in pants (front or back); hands near or on the genital area (in or out of clothes); disrobing; stimulation of the genital area via rocking on the floor; hands between legs; and hands touching sexual body parts of others. The Project Director checked observations simultaneously a minimum of two times (two-five minute periods) with each observer and client to establish a measure of reliability.

In a subsequent week, the process was repeated for all 20 participants, with the exception of intervention by Project Instructor with participants in providing support and resources for alternative activities. This period of intervention provided the following intervening resources: observer attention and support, play dough, puzzles, puppets, beads, regular school programming, art activities, etc. Frequency of behaviors were charted. Efforts at measuring observer reliability similar to the non-intervened observation period also occurred. Observation Checklist is illustrated in Appendix D.

5. Learner and Teacher Activities

All students were scheduled for programming (Goal I) for a maximum of one hour daily. When possible, students participated in exercises in small

groups (not exceeding 4 students). Eacn student participated in a minimum of three exposures to the cognitive data and objectives to assess their knowledge levels. Knowledge levels were assessed by simply asking the learner to identify a characteristic by verbalizing or pointing. If the effort was accurate, it was recorded as a correct response. Students scoring less than 90% accuracy on the pre-test were included in the intervention phase until their accuracy level reached 90%. Students participated in those objectives relevant to their sex. As a result, a capable and alert student could spend a minimum of 5 days in the program. Others remained in the program for a maximum of one year.

Those students who emitted inappropriate sexual behaviors during cognitive programming or elsewhere at the Redfield State Hospital and School were referred for behavior modification programming by either Project personnel or staff members outside the Project. Students referred for General Goal II activities participated in additional cognitive discussion and programming by Project personnel. The inappropriateness of his/her behavior was discussed with the accompaniment of positive alternative activities. Students then practiced the appropriate alternatives (stroking a rabbit's foot, participating in games or discussion, etc.) until the association became readily apparent to Project personnel. They were then asked to continue their understanding throughout the day. They were observed by Project personnel at sampled intervals for purposes of assessing generalization skills.

The Project personnel for both Goals I and II were delegated with the task of presenting the data to students, discussing the data with students; tabulating correct responses, referring students for behavior modification, creating positive alternative activities and tabulating observation checklists for each student.

6. Involvement of Parents and/or Community

Parents were informed of each student's participation in the program. During the initial information session with individual parents, Project goals and programming were shared. At times, video tapes of actual learning sessions were shown to parents to both inform the parents and garner their support. The positive responsiveness and support of parents is indicated by the lack of refusal by any parent regarding their child's participation in the program. Additionally, selected parents have recently been trained to continue awareness and behavior modification activities during home visits to facilitate the generalization of concepts by the students.

C. EVALUATION DESIGN

1. Brief Description of Evaluation Design

Table 1 on the following page briefly describes the evaluation instruments appropriate for each general goal, data collection procedures, responsible persons, sampling and control techniques. All instrumentation used either the climate observation or questionnaire format. No norm referencing was used. Sampling in various environments at different times of the day was used to control for bias in data.

2. Validity and Reliability of Data Gathering Instruments

a. Cognitive Awareness Assessment

This instrument was a modification of instruments available in sex education curriculum for the developmentally disable. Since the material presented was modified or created by staff members, the means for identification also had to be altered. (See Appendix A)

Validity - this measure is simply a checklist in recording correct responses verbal and non-verbal (pointing) to questions asked by Project personnel. The questions were evaluated by Project personnel and Northern State College staff evaluators and accepted as possessing face validity with the stated objectives. Data analysis was limited to a sample recording of the correct totals of responses with subsequent calculations of percentiles.

Reliability - consistency or reliability was determined through formal observation of teaching and recording processes by the outside evaluator and staff personnel. The comparison of scores recorded during intervention and rebaselining offer criteria for test-retest reliability.

No norm groups or criterion-referencing were used.

Table 1

Evaluation Design

Goals	Evaluation Instrument/Design	Data Collection	Responsible Persons	Sampling	Control Groups	Data Analysis
I	Needs Assessment (Appendix A) This is a modified instrument (see Final Evaluation, 1980) assessing participant performance with cognitive criteria. (90% accuracy required)	Pre and Post test data were collected on students before and after teach- - cognitive behavioral objectives.	Project Instructor Staff Assistant	NA	NA	Data was tabulated and appropriate percentiles were computed by Project personnel.
II	Inappropriate Behavioral Frequency Checklist (Appendix B). Participants were baselined and subject to alternate activity intervention and re-baselined.	Baselining frequency of student inappropriate behaviors occurred before, during and after intervention was completed.	Project Director Project Instructor Staff Assistant	NA	NA	Data was tabulated for each day both during intervention and nonintervention days. Inappropriate behaviors for each day were graphed.
III	Staff Pre/Post Questionnaire (Appendix C); Open-ended Evaluation (Appendix C);	Pre-test of Likert-scale questions was administered to staff before in-services. Post-test questions and Open-ended Evaluations were given upon workshop completion.	" " " "	NA	NA	In service training populations and locations were summarized in table form. Participant responses on Pre and Post tests were summarized with means and Chi Squares (.05) computed for each item.
IV	(Same as III)	(Same as III)	" "	NA	NA	(Same as III)
V	Behavioral Climate Checklist (Appendix D)	Frequency assessment of students in various locations, in groups and as individuals occurred before, during and after alternative activity intervention.	Project Instructor Staff Assistant	NA	With-in group control design.	Observation data indicating frequency of inappropriate behaviors were summarized and totaled for each individual and each environment. Additionally, results were graphed.

b. Behavioral Changes

This measure is also a checklist in recording frequency of inappropriate sexual behaviors observed by staff members through pre-selected observation intervals before, during, and after "alternate activity" intervention.

Validity - face validity was determined in the same way as General Goal I stated above. "Inappropriate behaviors" were summarily and specifically defined by Project personnel prior to observations.

Reliability - Observer/Observer reliability scores were calculated on selected subjects to determine consistency of observation. (See Table II.) Reliability scores ranged from .806 to .906. Additionally, the comparison of rebaselining to intervention behaviors offers a measure of test-retest reliability.

No norm groups or criterion-referencing were used.

c., d. In-Service Workshops

The Likert scaled questionnaire and open-ended questionnaire were self-designed.

Validity - items contained in both instruments were evaluated by Project personnel and outside Northern State College evaluators for face validity.

Reliability - no formal measure of reliability was calculated; however, the informal comparison of responses from staffing to staffing and year to year on pre tests and post tests separately serves as a test-retest indicator of consistency.

No norms or criterion-referencing were used.

Table 2

TABLE OF OBSERVER RELIABILITY MEASURES

FEMALE

Non-Intervened			Intervened		
Subject #	Obs. 1	Obs. 2	Subject #	Obs. 1	Obs. 2
1	3	3	1	3	3
2	3	3	2	3	2
3	3	3	3	3	3
4	3	3	4	3	3
5	3	3	5	3	2
6	3	3	6	3	2
7	3	3	7	3	3
8	3	3	8	3	3
9	3	3	9	3	2
10	3	2	10	3	3
	r = 90.6%			r = 80.6%	

MALES

Non-Intervened			Intervened		
Subject #	Obs. 1	Obs. 2	Subject #	Obs. 1	Obs. 2
1	3	3	1	2	2
2	3	3	2	2	2
3	3	3	3	2	2
4	3	2	4	2	2
5	3	3	5	2	2
6	3	2	6	2	1
7	3	3	7	2	2
8	3	2	8	2	1
9	3	3	9	2	2
10	3	2	10	2	2
	r = 80.6%			r = 90%	

Total r = 90%

e. Climate Study

The climate study followed the same format as instrumentation in General Goal II. The exception was the sampling of a larger population of students in a greater variety of locations and time intervals.

Validity and Reliability were determined in the same manner as General Goal II.

3. Evidence of Systematic Gathering and Recording

Each evaluation activity was described in parts 1 and 2 of this section. Data was collected for Goals I and II on a quarterly basis. Data on remaining goals were completed immediately prior to and after the objective was completed. A final evaluation report was filed documenting the data and activities at the end of each Project year.

D. RESULTS AND ANALYSIS

1. Data for General Goals and Objectives 1-5

I. Cognitive Awareness:

a. Body Parts Program

Table 3 illustrates the accuracy measurements of the 20 participants in the identification of body parts. Seven achieved 90% accuracy in rebaselining while eighteen achieved a rebaselined accuracy level of at least 60%.

b. Sex Discrimination

Table 4 illustrates the accuracy of baselining and rebaselining of three participants in the program identifying physical characteristics of clothed objects and persons. Two participants were rebaselined with 50% accuracy in identifying characteristics with the third participant remaining baselined with 100% accuracy.

c. Puberty Changes

Table 5 illustrates the accuracy of identification by six participants of physical sexual characteristics on unclothed objects or dolls. Improvement was measured for all participants during the intervention period. Intervention scores were maintained through re-baselining. Four participants finished with 100% accuracy on all items; one participant finished with 100% accuracy on the Boy/man, 33% accuracy on the Girl/woman; and one finished with 33% accuracy on the Boy/man, 0% accuracy on the Girl/woman.

d. Menstrual Hygiene

Several females participated in the menstrual hygiene program.

BODY PARTS
Table 3

	PRETEST	INTERVENTION				POST-TEST
STUDENTS	Baseline # of Correct Responses Using Pictures	# of Correct Responses Touching Self	# of Correct Responses Touching Dolls	# of Correct Responses Touching Pictures	Setting Puzzles of Body Parts	Rebaseline
Student 1	59%	62%	59%	59%	no	60%
Student 2	17%	21%	21%	17%	no	20%
Student 3	83%	93%	93%	93%	yes	93%
Student 4	76%	97%	97%	97%	yes	97%
Student 5	66%	93%	93%	93%	no	93%
Student 6	69%	72%	72%	72%	no	72%
Student 7	79%	93%	93%	93%	yes	93%
Student 8	48%	72%	72%	72%	no	72%
Student 9	62%	86%	86%	86%	no	86%
Student 10	62%	66%	66%	66%	no	66%
Student 11	62%	69%	69%	69%	no	69%
Student 12	79%	93%	93%	93%	no	93%
Student 13	62%	79%	79%	79%	no	79%
Student 14	90%	97%	97%	97%	yes	97%
Student 15	62%	79%	79%	79%	yes	79%
Student 16	83%	97%	97%	97%	yes	97%
Student 17	69%	76%	76%	76%	no	76%
Student 18	66%	72%	72%	72%	no	72%
Student 19	79%	89%	89%	89%	no	89%
Student 20	41%	52%	52%	52%	no	52%

Table 4

PHYSICAL CHARACTERISTICS

	BASELINE	INTERVENTION		RE-BASELINE
Student	Males/Females	Males	Females	Males/Females
Student 1	50%	100%	100%	100%
Student 2	0%	50%	50%	50%
Student 3	50%	50%	50%	50%

TABLE 5

PUBERTY CHANGES

	BASELINE		INTERVENTION				RE-BASELINE	
Student	Boy/Man	Girl/Woman	Boy	Man	Girl	Woman	Boy/Man	Girl/Woman
Student 1	33%	100%	100%	100%	100%	100%	100%	100%
Student 2	33%	33%	100%	100%	100%	100%	100%	100%
Student 3	100%	66%	100%	100%	100%	100%	100%	100%
Student 4	100%	0%	100%	100%	33%	33%	100%	33%
Student 5	0%	0%	33%	33%	0%	0%	33%	0%
Student 6	100%	33%	100%	100%	100%	100%	100%	100%

Results are illustrated in Table 6. Six participants were able to achieve independence with sanitary self-care during menses. Thirteen were able to attain 10 or more out of 17 of the correct responses in the behavioral sequence.

e. Social Behaviors

Three residents participated in the social behavior program as illustrated in Table 7. Two of the three were able to express "thank you" independently with 100% accuracy through baselining.

f. Appropriate Time and Place for Given Behaviors

There were twelve participants in programming regarding inappropriateness of time and place for sexual behaviors. Ten participants were re-baselined with at least 90% accuracy with the remaining two participants reaching 89% and 72% accuracy on programming criteria. Daily group sessions during the intervention process varied on an individual basis from fifteen to twenty sessions. (Table 8)

Table 9 offers a summary of cognitive awareness changes for program participants in 1981 and 1982. One hundred percent (100%) showed improvement in all behavioral objectives for both years with the exception of 88% (1981) for the menstrual hygiene program. Criterion of 60% showing improvement was met for all behavioral objectives for both years.

The accuracy criterion of 60% was met for all behavioral objectives for both years with the exception of 33% (1981) in physical characteristics and 50% (1981) in menstrual hygiene.

II. Modification of Inappropriate Sexual Behaviors:

In Illustration 1, three suggest the graphic results of baselining, intervention and rebaselining through frequency counting of sexually

inappropriate behaviors. In Illustration 1, females #1 and #3 experienced a substantial drop in frequency of inappropriate behaviors as a result of intervention techniques. Female #2 experienced a minor reduction.

In Illustration #2, male #3 experienced substantial behavioral reduction; male #2 an overall absence of inappropriate behaviors; and male #1 a partial reduction in rebaselining after participating in intervention strategies illustrated in Final Evaluation, 1980. For male #1 inappropriate behaviors were evident in only two of the eleven observed days, with remaining days indicating minimal incidence or non-existence of inappropriate behaviors.

In Illustration 3, males #4 and #6 experienced a substantial drop in frequency of inappropriate behaviors as a result of intervention techniques. For male #5 there were no inappropriate behaviors evident in the five observed days in the non-intervention period, with remaining days indicating non-existence of inappropriate behaviors.

III & IV In Service Workshops and Consultation

Table 9 illustrates the total number of workshop experiences offered during the 1980-1981 year for both on and off-site activities. There was a total of 47 hours of training with a grand total of 456 participants.

Spin-off activities were quite extensive in response to Project objectives and resources. Table 10 illustrates the activities that exceeded expectations of primary Project personnel. Table 11 illustrates the results of pre and post workshop assessment. In all cases of the 263 participants assessed, mean response values moved toward the ideal response in post testing. Significant differences were measured in 16 of the 23 items at the .05 level in Chi Square assessment. Table 12

illustrates the means for pretest and post test as well as the ideal response categorization. Responses to the open-ended evaluation of the workshop by participants were very favorable. Criticisms appeared to be selective and somewhat limited in response pervasiveness. See Table 13.

Table 6

MENSTRUAL HYGIENE PROGRAM

	PRETEST	INTERVENTION		POST-TEST	
STUDENTS	Baseline # Correct and In Sequence	# Correct with Verbal cues, Not in Sequence	# Correct and in sequence with Verbal Cues	Rebaseline # Correct and In Sequence	Complete Independence
Student 1	6	12	7	7	no
Student 2	7	17	17	17	no
Student 3	1	9	9	9	no
Student 4	18	17	17	17	yes
Student 5	9	15	10	7	no
Student 6	13	17	17	17	yes
Student 7	9	17	17	12	no
Student 8	12	17	17	17	yes
Student 9	12	17	17	17	yes
Student 10	5	17	15	15	no
Student 11	12	17	17	17	yes
Student 12	10	17	17	17	no
Student 13	6	14	6	6	no
Student 14	12	17	17	17	no
Student 15	7	17	17	17	no
Student 16	5	17	17	10	no
Student 17	12	17	17	17	yes

Table 7

SOCIAL BEHAVIORS

	BASELINE	INTERVENTION	RE-BASELINE
Student	VERBALIZES "Thank you" Independently	Verbalizes "Thank You"	Verbalizes "Thank You" Independently
Student 1	0%	100% independently	100%
Student 2	0%	100% with verbal cues	75%
Student 3	0%	100% independently	100%

Table 8

APPROPRIATE TIME AND PLACE FOR GIVEN BEHAVIORS

	PRETEST	INTERVENTION	POST TEST
STUDENTS	Baseline % of Correct Responses	Daily Group Sessions	Rebaseline % of Correct Responses
Student 1	81%	18	100%
Student 2	100%	20	100%
Student 3	*	12	96%
Student 4	57%	20	96%
Student 5	76%	20	89%
Student 6	83%	20	100%
Student 7	100%	17	100%
Student 8	56%	20	94%
Student 9	65%	15	72%
Student 10	63%	20	100%
Student 11	100%	20	100%
Student 12	100%	20	100%

* = test not given-student at home.

Table 9

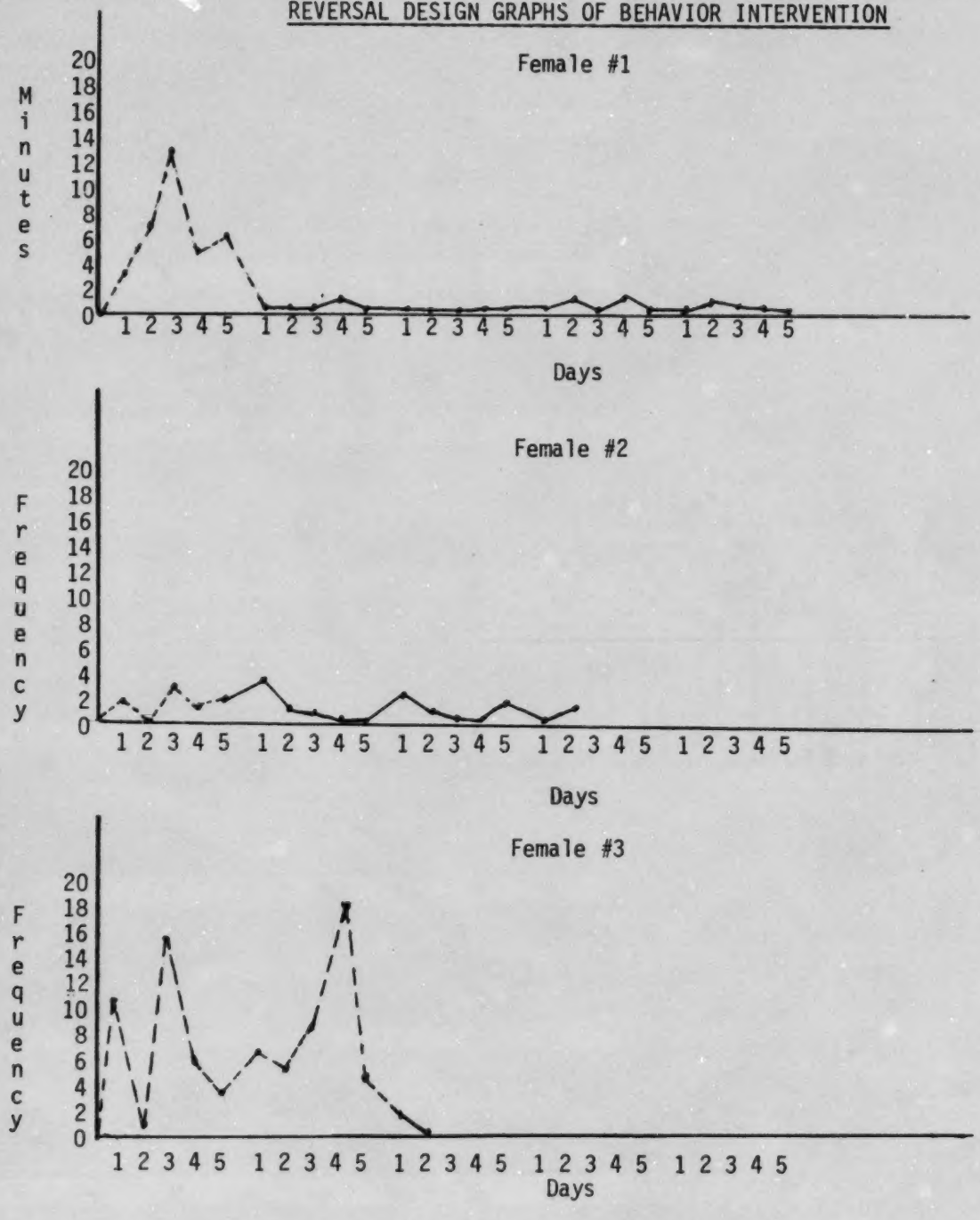
DATA SUMMARY OF COGNITIVE AWARENESS CHANGES

	(1981)				(1982)			
	N 1	% Improved	% Meeting Criterion	** N 2	N 1	% Improved	% Meeting Criterion	** N 2
Body Parts	20	100%	61*	13	20	100*	90*	10
Sex Discrimination (Physical Characteristics)	3	100%	33	3	2	100*	100*	1
Puberty Changes	6	100%	60*	5	12	100*	80*	10
Menstrual Hygiene	17	88%	50	12	11	100*	87.5	8*
Social Behaviors	3	100%	100	3*	--	--	--	Summary
Time and Place for Given Behaviors	7	100%	100	4*	--	--	--	Possible 20 Obj. 18 Met

* Met objective
** Differs from N 1 because some students started above criteria level.

Illustration 1

REVERSAL DESIGN GRAPHS OF BEHAVIOR INTERVENTION

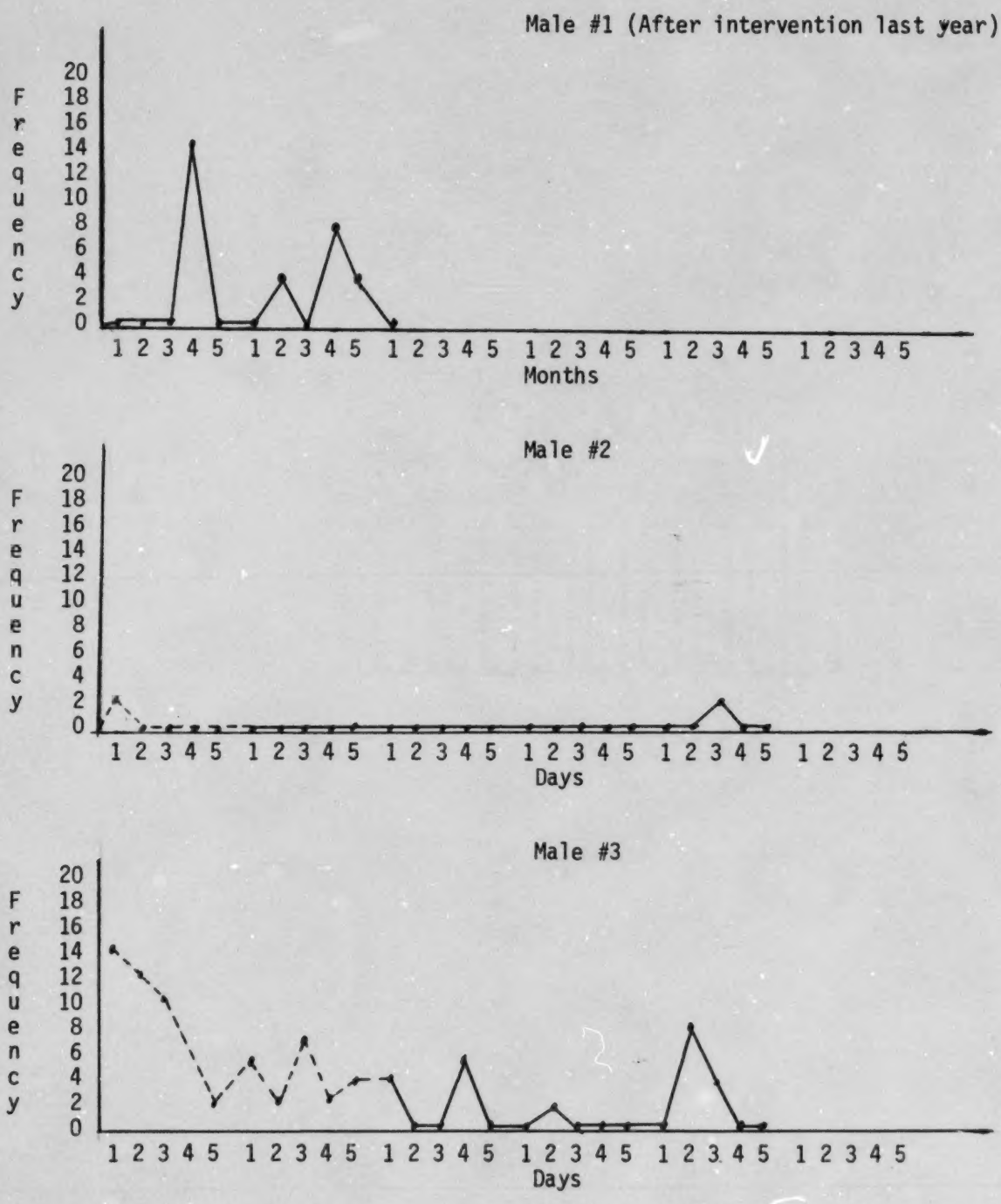


Non-intervened - - - - -

Intervened ————

Illustration 2

REVERSAL DESIGN GRAPHS OF BEHAVIOR INTERVENTION



Non-Intervened - - - - -

Intervened ————

Illustration 3

REVERSAL DESIGN GRAPHS OF BEHAVIOR INTERVENTION

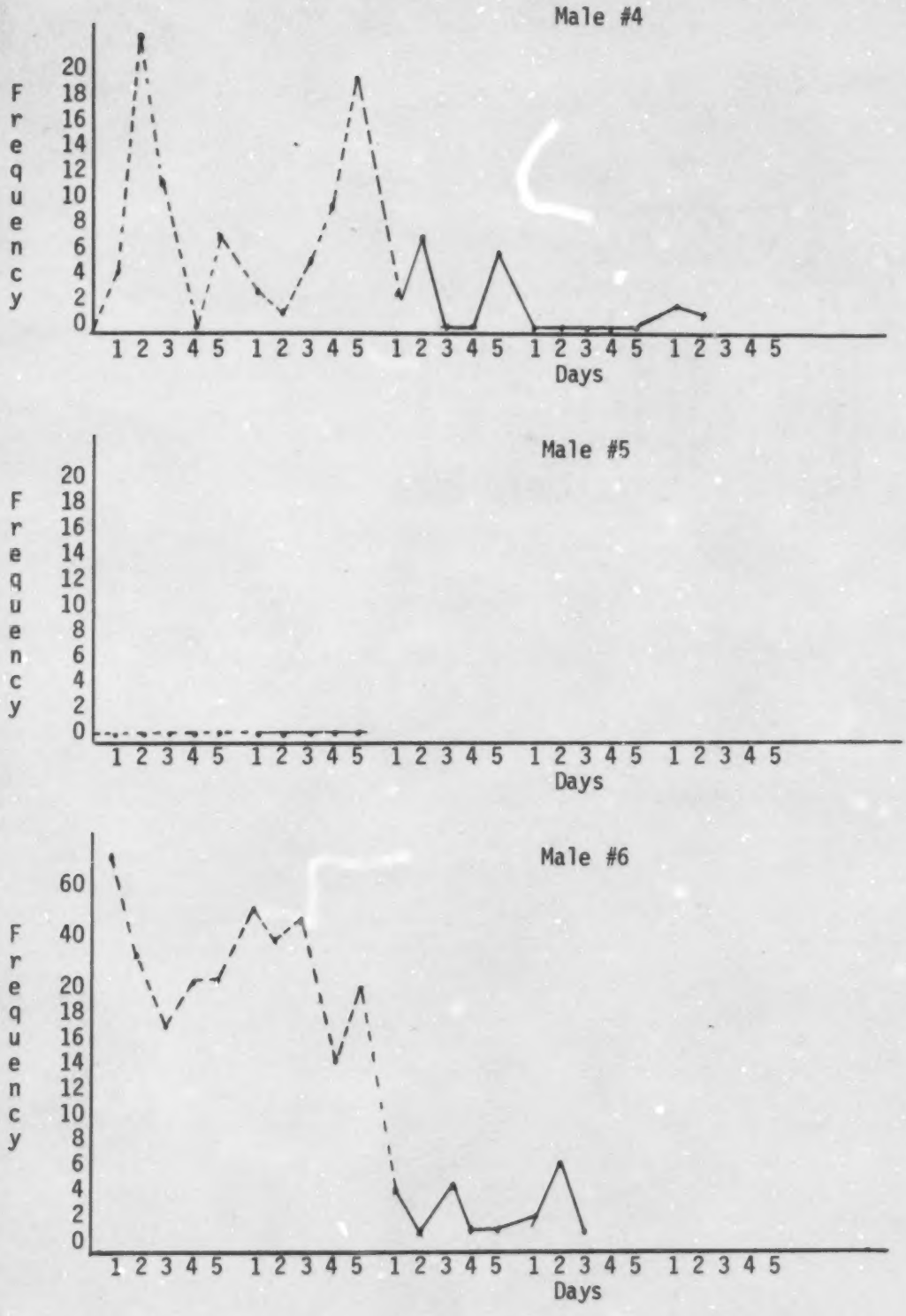


Table 10

WORKSHOPS DURING YEAR 1980 and 1981

Human Sexuality
RSHS

DATE	HOURS	LOCATION	PARTICIPANTS
2/27/81	3½ hours	Vermillion Adjustment Training Center and Special Ed. Staff from Public School	12
2/26/81	3½ hours	Madison Adjustment Training Center	13
1/9/81	4 hours	Staff from RSHS Educational Unit	8
1/7/81	4 hours	Staff from RSHS Vocational Unit	33
1/6/81	4 hours	Staff from RSHS Vocational Unit	52
11/14/80	2 hours	S.D. Community Humanities Panel, Hot Springs (parents, professionals, Senator)	18
11/13/81	2 hours	Staff from RSHS Womens Developmental Unit	14
11/13/80	2 hours	Staff from RSHS Womens Developmental Unit	14
11/10/80	2 hours	Staff from RSHS Womens Developmental Unit	9
11/6/80	3 hours	Huron Adjustment Training Center	5
10/4/80	2 hours	Parents at Parents Day RSHS	20
8/28/80	2 hours	Monthly in-service sponsors through Institution In-Service Department-New and Status Employees	23
8/7/80	2½ hours	Monthly In-Service sponsored through Institution In-Service Department-New and Status Employees	43
7/9/80	2 hours	Monthly In-Service sponsored through Institution In-Service Department-New and Status Employees	28
7/25/80	1 hour	Staff at School Department at RSHS	17
9/17/80	1 hour	Professional Staff of Educational Unit at RSHS	21
9/4/80	2½ hours	Foster Parents-Lutheran Social Services Sioux Falls, South Dakota	16
2/12/81	2½ hours	Foster Grandparents at RSHS	22
4/7/81	1½ hours	Nurses and Professional at State Nursing Convention in Pierre	69
	47 hours		456

Table 11

SPIN OFF FROM IN-SERVICE

RSHS

Human Sexuality

1. As a result of in-service, sexuality awareness programs have been implemented in the following Adjustment Training Centers
   A. Huron
   B. Vermillion
   C. Madison

   We have also acted as consultants and have shared materials with them.

2. As a result of in-service to Foster Grandparents:
   A. two of the grandparents are very involved in helping to decrease the inappropriate public self-masturbation
   B. one is helping to insure her client wears pad during menstrual cycle.

3. As a result of in-service to employees in Women's Developmental Unit at RSHS:
   A. one Case Manager III is utilizing the Feminine Hygiene Program as a part of in-service for his employees.
   B. Case Managers are now including sexuality programs as needed for clients total program.
   C. Clients from the Women's Unit invited clients from the Men's Unit to attend an evening dinner and social hour, this is a first!!

4. As a result of In-Service training to employees of Vocational Unit at RSHS:
   A. Case Manager III and Psych Tech have consulted privately with project staff and are utilizing the feminine hygiene program with their clients.

5. As a result of In-Service training within Education Unit at RSHS:
   A. Case Manager III is including feminine hygiene programs as a part of formal in-service for all new and status employees.
   B. The majority of all professional and direct care staff are aware of and are making attempts to help decrease public self-masturbation, i.e., requesting the clients stop the behavior, physically removing their hands, substituting alternative activities such as key chains, rabbit foot, small hand-held manipulatives and etc., implementing formal behavior programs, listing the inappropriate behavior as a need at annual staffings, discussing the problem with client's parents and etc.
   C. Teachers and aides are carrying through feminine hygiene program for their clients in the classroom.
   D. A majority of dorm parents are carrying through with feminine hygiene program for their clients in their dorm areas.

6. In-service at Lutheran Social Services at Sioux Falls, State Nursing Convention in Pierre, and Developmentally Disable Panel presentation in Hot Springs. parents, friends, professional and direct care personnel from across the State and from four surrounding states have been introduced to the existing sexuality program at RSHS.

7. Parents' Day at RSHS:
   Several parents have consulted privately with project staff, concerning the curriculum and etc.

Table 12

Test N = 263
Pretest N = 263

SEX EDUCATION WORKSHOP
PRETEST AND POSTTEST RESULTS

		STRONGLY AGREE 1	2	3	4	STRONGLY DISAGREE 5	
1. Sexuality begins at birth and continues until death.	PRE	130	98	22	6	6	x^2 = 26.48
	POST	166	68	3	3	2	sig.= .00
		1	2	3	4	5	
2. Mentally handicapped must be helped to mature sexually.	PRE	122	105	19	13	2	x^2 = 12.41
	POST	124	105	6	3	1	sig.= .01
		1	2	3	4	5	
3. Sex education will motivate student sexually.	PRE	19	40	87	88	24	x^2 = 14.22
	POST	12	42	50	98	37	sig.= .00
		1	2	3	4	5	
4. Mentally handicapped have a right to sexual expression.	PRE	82	130	25	10	12	x^2 = 20.92
	POST	108	116	10	3	2	sig.= .00
		1	2	3	4	5	
5. Wait till handicapped experience changes to discuss.	PRE	9	27	54	97	72	x^2 = 19.28
	POST	11	29	17	103	79	sig.= .00
		1	2	3	4	5	
6. Society can't cope with sexuality of mentally handicapped.	PRE	78	133	24	19	6	x^2 = 8.93
	POST	89	123	10	10	4	sig.= .06
		1	2	3	4	5	
7. Parents are unable to discuss sex with children.	PRE	91	143	16	10	1	x^2 = 1.26
	POST	86	133	10	7	1	sig.= .86
		1	2	3	4	5	
8. Can be taught that sexual behavior be done in private.	PRE	80	135	34	7	4	x^2 = 29.61
	POST	109	120	6	3	0	sig.= .00

		STRONGLY AGREE				STRONGLY DISAGREE	
		1	2	3	4	5	
9. Individual has right to accept or reject sex. behavior.	PRE	79	133	31	11	4	x^2 = 7.19
	POST	89	115	22	3	2	sig.= .12
		1	2	3	4	5	
10. Masturbation is a normal expression of sexuality.	PRE	59	132	42	21	4	x^2 = 27.61
	POST	79	138	13	6	1	sig.= .00
		1	2	3	4	5	
11. Sex info can be taught in a few minutes.	PRE	13	51	64	89	44	x^2 = 26.14
	POST	23	67	21	79	46	sig.= .00
		1	2	3	4	5	
12. Sexuality includes more facts than just reproduction.	PRE	94	136	17	9	3	x^2 = 21.72
	POST	120	104	5	1	0	sig.= .00
		1	2	3	4	5	
13. Thoughts about homosexuality doesn't make one a homo.	PRE	51	135	48	14	7	x^2 = 17.32
	POST	72	127	22	7	2	sig.= .00
		1	2	3	4	5	
14. Staff & parents should swamp handicapped person with love.	PRE	23	46	39	112	39	x^2 = 5.88
	POST	14	36	26	102	50	sig.= .20
		1	2	3	4	5	
15. Persons can be taken advantage of sexually.	PRE	74	147	18	14	6	x^2 = 15.81
	POST	104	106	12	5	5	sig.= .00
		1	2	3	4	5	
16. Abortion should be alternative to mentally handicapped.	PRE	62	83	51	32	30	x^2 = 5.43
	POST	47	95	35	30	22	sig.= .24
		1	2	3	4	5	
17. Mentally handicapped have right to all knowledge of sex.	PRE	108	119	18	10	2	x^2 = 13.55
	POST	112	111	4	2	3	sig.= .01

		STRONGLY AGREE				STRONGLY DISAGREE	
		1	2	3	4	5	
18. Sterilization is the best means of birth control.	PRE	35	52	50	79	41	x^2 = 7.20
	POST	25	30	43	86	46	sig.= .12
		1	2	3	4	5	
19. Mentally handicapped are incapable of being parents.	PRE	17	28	65	93	55	x^2 = 7.17
	POST	17	16	42	103	51	sig.= .12
		1	2	3	4	5	
20. When mentally handicapped reproduce - baby is retarded.	PRE	9	20	78	90	51	x^2 = 25.42
	POST	4	9	36	120	58	sig. .00
		1	2	3	4	5	
21. Mentally handicapped should be able to marry.	PRE	40	114	67	24	13	x^2 = 5.28
	POST	36	121	47	20	6	sig.= .25
		1	2	3	4	5	
22. Sex education should be available to mentally handicapped.	PRE	88	137	19	8	2	x^2 = 10.49
	POST	101	118	9	1	1	sig.= .03
		1	2	3	4	5	
23. No successful sex ed. unless staff is consistent attitude.	PRE	96	126	25	6	2	x^2 = 12.98
	POST	113	104	7	4	1	sig.= .01

Table 13

COMPARISONS OF MEAN RESPONSES
ON PRETEST AND POST TEST RESULTS WITH IDEAL RESPONSE

QUESTION	N = 263 MEAN PRETEST	N = 263 MEAN POST TEST	IDEAL RESPONSE
1. Sexuality begins at birth and continues until death.	1.70	1.38*	1
2. Mentally handicapped must be helped to mature sexually.	1.72	1.54*	1
3. Sex education will motivate students sexually.	3.22	3.44*	4-5
4. Mentally handicapped have a right to sexual expression.	1.99	1.64*	1
5. Wait till handicapped experience changes to discuss.	3.75	3.88*	4
6. Society can't cope with sexuality of handicapped.	2.01	1.80	1-2
7. Parents are unable to discuss sex with children.	1.80	1.75	1-2
8. Can be taught that sexual behavior be done in private.	1.92	1.59*	1
9. Individual has right to accept or reject sexual behavior.	1.95	1.76	1-2
10. Masturbation is a normal expression of sexuality.	2.14	1.78*	1
11. Sex info can be taught in a few minutes.	3.38	3.25*	5
12. Sexuality includes more facts than just reproduction.	1.80	1.50*	1-2
13. Thoughts about homosexuality doesn't make one a homo.	2.18	1.87*	1-2
14. Staff & parents should swamp handicapped person with love.	3.37	3.60	5

QUESTION	MEAN PRETEST	MEAN POST TEST	IDEAL RESPONSE
15. Persons can be taken advantage of sexually.	1.96	1.71*	1
16. Abortion should be alternative to mentally handicapped.	2.55	2.50	3
17. Mentally handicapped have right to all knowledge of sex.	1.75	1.59*	1
18. Sterilization is the best means of birth control.	3.15	3.42	3
19. Mentally handicapped are incapable of being parents.	3.54	3.68	3
20. When mentally handicapped reproduce - baby is retarded.	3.62	3.97*	4-5
21. Mentally handicapped should be able to marry.	2.44	2.30	1-2
22. Sex education should be available to mentally handicapped.	1.81	1.62*	1
23. No successful sex ed. unless staff is consistent attitude.	1.79	1.59	1
Total Mean	1.00	2.00*	

* denotes significant difference in responses in the direction of the ideal responses.

Table 14

SEX INSERVICE OPEN-ENDED COMMENTS N = 263

1. Was your attendance at this In-service: Required 52 Not-Required 198

2. Did you feel the short sexuality awareness session was worthwhile?
   Yes 233 No 22

3. Have any of your own attitudes changed during the in-service?
   Yes 252 No 10

4. Was there any part of the subject matter that made you uncomfortable?
   Yes 24 No 232

   If so, what?:
   - Discussion about sex in mixed company.
   - Discussion about masturbation.
   - Some of the terms offended me.

5. Please list or describe any topic not covered which you think would be beneficial in future seminars:
   - Different skills and techniques.
   - More on behavior modification.
   - Identifying skill levels of residents.
   - Help for the oversexed person.
   - Medical intervention.
   - What about women who can't take care of themselves during menstruation.
   - Spiritual and moral discussion.
   - What is unnatural or inappropriate sex.
   - More emphasis on where and when sex behaviors are allowable.
   - Oral sexual activity.

6. What do you think should have been:
   a. Given more emphasis _____ (No significant responses)
   b. Given less emphasis _____ (No significant responses)

7. Would you recommend this in-service be continued?

   Definitely 214 Perhaps 33 No 11

8. Which techniques presented will be most applicable to your work?
   - Explaining male and female care.
   - The expression of a more open attitude about sex.
   - Dealing with masturbation.
   - Behavior modification techniques.
   - How to answer residents' questions about sex.
   - Small group desensitizing sessions.
   - Body parts training.
   - Helping residents with menstruation.
   - Developing alternative activities.
   - Consistent treatment and not ignoring masturbation.
   - Everything.
   - How to discourage inappropriate petting.

9. Which techniques presented will be least applicable to your work?

   (no significant responses)

10. Do you think the in-service has or will influence the way you work with the mentally handicapped from now on?

    Yes 240 No 20

11. Final comments:

    Give us more breaks during the sessions.
    Do something for/about the smokers.
    Excellent job.
    This should be required of all staff members.
    Everyone should see the audio-visuals.
    Give us copies of policy.
    What about dealing with the lower functional residents.
    I think we would talk more if we had all male or all female classes.
    This should not be required.
    There was nothing new.
    This was a waste of time.
    I enjoyed it.
    Good information.
    We need more time.
    Very worthwhile.
    Material was well presented.
    We should demand more discussion.

V. Behavioral Climate Study and Intervention

The frequency of sexually inappropriate behavior for males (Table 14) and females (Table 15) appears to occur most often in group situations and most often in the dayroom when compared to the frequency of individual assessment as well as other locations within the Redfield State Hospital and School. The impact of intervention through the introduction of alternate activities appears to substantially reduce the incidence of sexually inappropriate behaviors. (Illustration 4, 5) When comparing the frequency of male inappropriate behaviors to female inappropriate behaviors on Monday, Friday and the weekend, males tended to show a greater frequency. Both sexes showed substantial reduction in frequency at all times during the week and weekend as a result of intervention (Table 16, Illustrations 6 and 7). Table 17 indicates data analysis using the t score for comparisons of frequencies of non-intervention to intervention for males, females and the total population. Significant differences were realized at the .05 level.

2. Control Groups

No control groups were utilized, per se, since no formal random samplings procedures were used. The impact of control was apparent, however, in the within-group design of the behavioral climate study. Participants were their own control groups when appearing as non-intervened participants to intervened participants.

3. Instrument Identification

Description of instruments is provided for under Intervention Process (3). Support for instrument sensitivity, reliability and validity are provided for in final evaluation, 1980. All instruments appear in the Appendices.

Table 15

TABLE OF BEHAVIORAL CLIMATE OF SEXUALLY INAPPROPRIATE BEHAVIOR N = 10

NI = Non-Intervention
I = Intervention

OF MALES

Males #	Individual		Group		Dayroom		Bedroom		Dining R.		School		Bathroom		Foster G. Parents		Totals		
	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I	
3	49	27	173	25	142	26	0	5	19	10	13	10	48	1	0	0	222	52	
5	0	14	114	9	29	13	0	0	85	1	0	4	0	0	0	5	114	23	
1	32	77	627	35	561	77	7	0	9	3	45	12	7	0	30	20	659	112	
2	1	31	268	17	249	45	0	0	12	0	8	1	0	2	0	0	269	48	
4	0	2	4	2	2	4	0	0	0	0	2	0	0	0	0	0	4	4	
6	22	61	322	30	306	48	10	4	18	18	7	12	3	9	0	0	344	91	
7	57	109	724	164	349	76	6	15	275	101	26	24	7	24	118	33	781	273	
10	28	54	193	21	149	29	11	0	7	8	34	24	17	1	3	13	221	75	
9	8	6	246	0	246	5	0	1	0	0	8	0	0	0	0	0	254	6	
8	76	113	550	140	326	117	0	1	191	104	107	25	2	6	0	0	666	253	Total Behaviors = 4431
TOTALS	273	494	3221	443	2359	440	34	26	616	245	250	112	84	43	151	71	3494	937	

Table 16

TABLE OF BEHAVIORAL CLIMATE OF SEXUALLY INAPPROPRIATE BEHAVIOR OF FEMALES

N = 10

I = Intervention
NI = Non-intervention

Females #	Individual		Group		Dayroom		Bedroom		Dining R.		School		Bathroom		Foster G. Parents		Totals		
	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I	
8	6	2	946	2	946	0	0	0	0	2	4	2	2	0	0	0	952	4	
10	21	18	868	31	868	2	0	5	22	16	33	8	4	0	18	0	927	49	
2	3	32	84	8	84	27	0	2	10	1	24	6	3	2	0	2	121	40	
7	33	20	161	32	161	1	0	5	14	10	54	11	3	3	41	22	273	52	
5	5	9	11	4	11	8	0	0	0	4	2	0	3	1	0	0	16	13	
4	24	38	28	3	28	30	0	1	1	0	9	0	13	10	12	0	63	41	
6	51	15	82	11	82	1	0	0	0	0	41	9	0	16	0	7	130	26	
1	1	0	6	0	6	0	1	0	0	0	0	0	0	0	0	0	7	0	
9	1	0	3	0	3	0	1	0	0	0	0	0	0	0	0	0	4	0	
3	0	0	13	0	13	0	0	0	0	0	0	0	0	0	1	0	14	0	Total Behavior = 2732
Totals	145	134	2362	91	2202	69	2	13	47	33	167	36	28	32	72	31	2507	225	

41a

Illustration 4

GRAPH ILLUSTRATING BEHAVIORAL CLIMATES OF SEXUALLY INAPPROPRIATE BEHAVIORS OF MALES

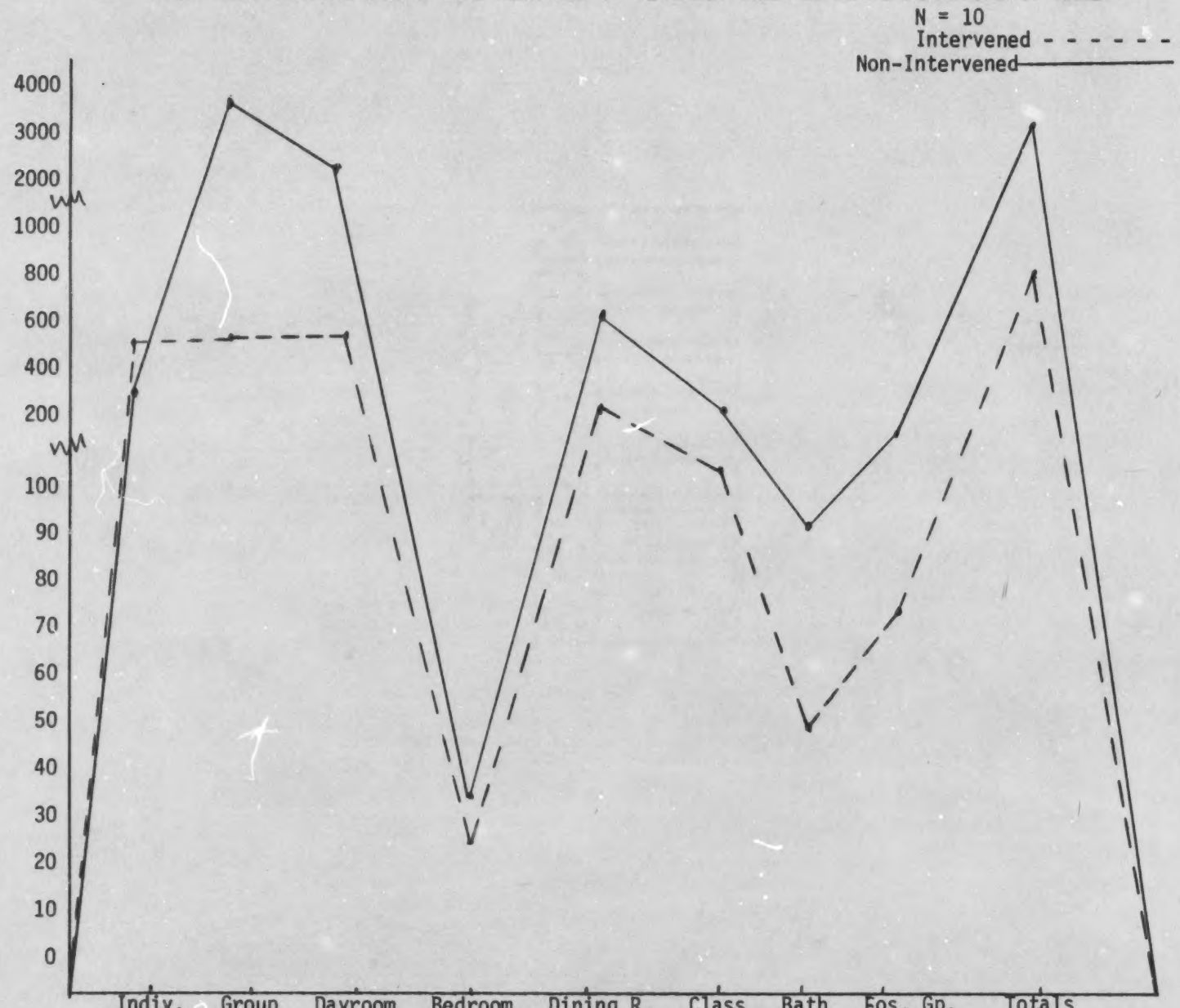


Illustration 5

GRAPH ILLUSTRATING BEHAVIORAL CLIMATES OF SEXUALLY INAPPROPRIATE BEHAVIORS OF FEMALES

N = 10

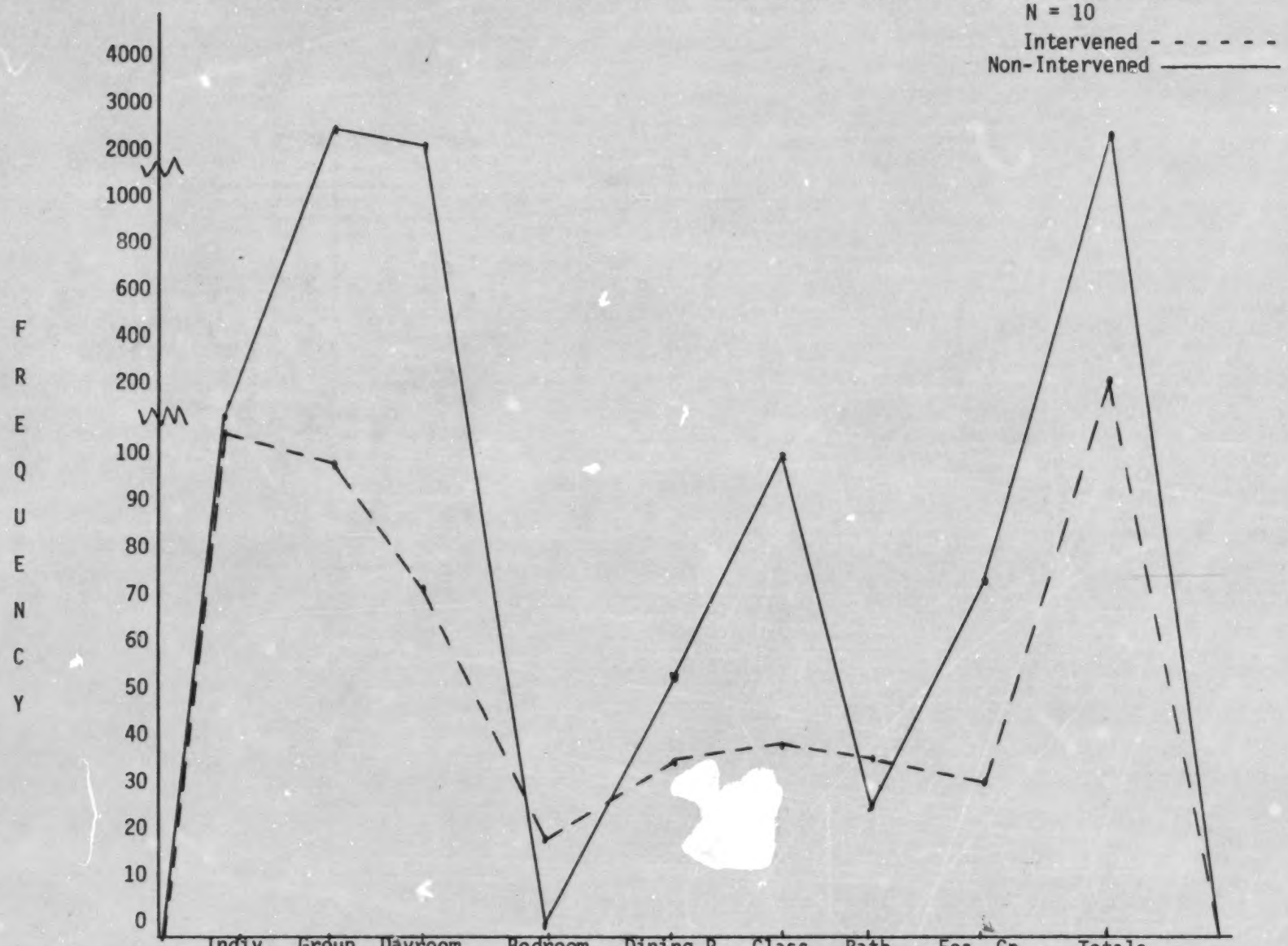


Table 17

N = 20

COMPARISONS OF SEXUALLY INAPPROPRIATE BEHAVIORS AS A RESULT OF INTERVENTION AND NON-INTERVENTION BY STAFF MEMBERS

Sex/No.	Monday		Friday		Saturday		Sunday		Total	
	I	NI	I	NI	I	NI	I	NI	I	NI
F 1	0	3	0	0	0		1		0	4
F 2	2	13	2	22	20		29		24	64
F 3	0	0	0	8	0		2		0	10
F 4	1	2	21	4	12		13		34	19
F 5	1	1	0	5	5		2		6	8
F 6	6	11	5	26	0		25		11	62
F 7	3	22	6	57	2		76		11	155
F 8	0	0	2	132	2		786		4	918
F 9	0	0	0	0	0		2		0	2
F 10	4	143	14	175	2		243		20	561
subtotal	17	195	50	429	43		1179		110	1803
M 1	8	281	6	37	21		193		35	511
M 2	5	12	6	49	15		99		26	160
M 3	3	27	10	36	14		84		27	147
M 4	0	1	1	0	2		2		3	3
M 5	4	71	11	12	3		4		18	87
M 6	9	46	18	50	17		135		44	231
M 7	37	98	39	135	77		222		153	455
M 8	40	160	47	58	105		174		192	392
M 9	0	2	1	2	3		111		4	115
M 10	8	27	26	6	15		90		49	123
subtotal	114	725	165	385	272		1114		551	2224
Total	131	920	215	814	315		2293		661	4027

Illustration 6

GRAPH OF COMPARISONS OF SEXUALLY INAPPROPRIATE BEHAVIORS AS A RESULT OF INTERVENTION AND NON-INTERVENTION BY STAFF MEMBERS

N = 20
Males————
Females- - - - -

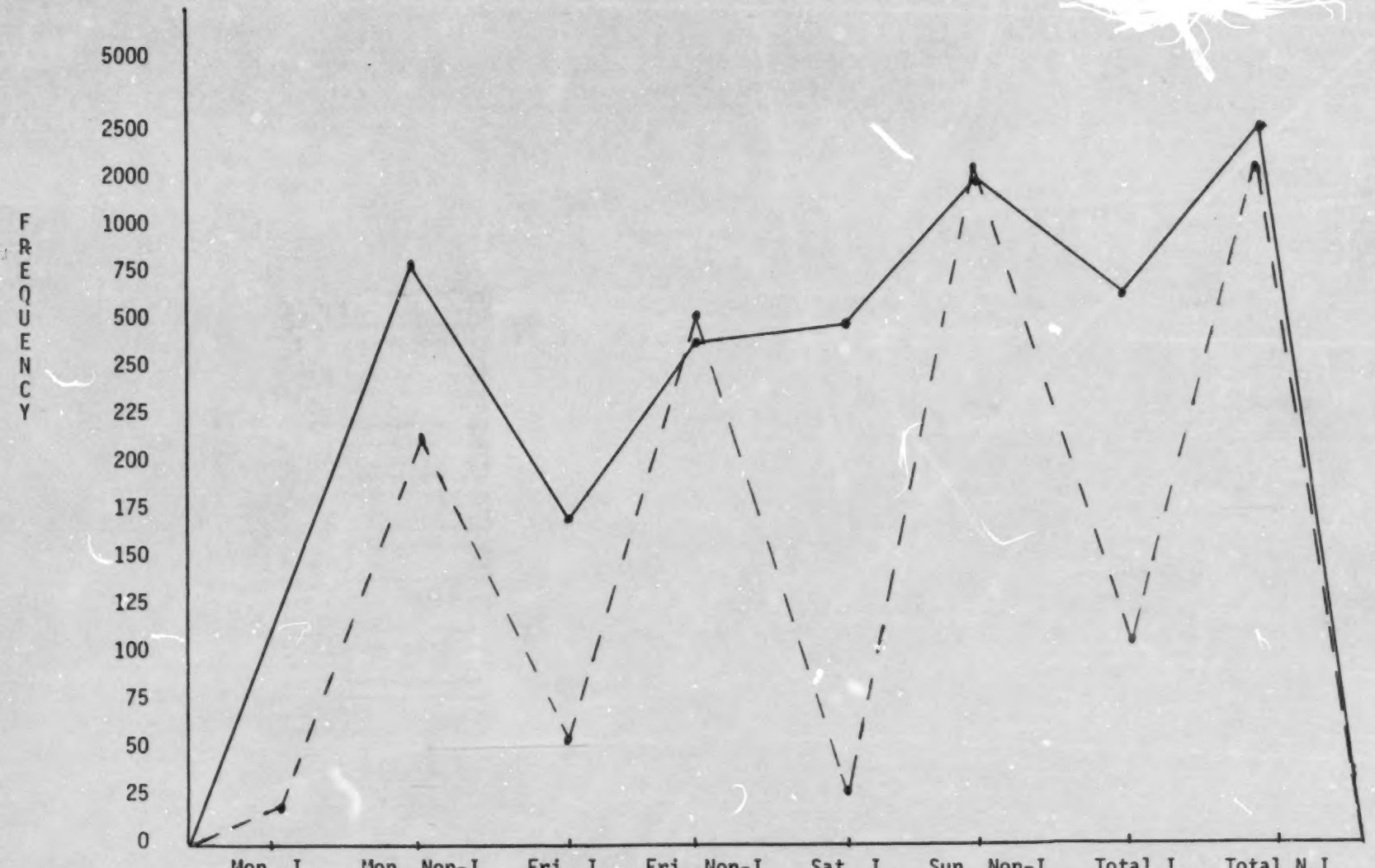


Illustration 7

N = 20

GRAPH OF COMPARISONS OF SEXUALLY INAPPROPRIATE BEHAVIORS AS A RESULT OF INTERVENTION AND NON-INTERVENTION BY STAFF MEMBERS

Intervention - - - - -
Non-Intervention ————

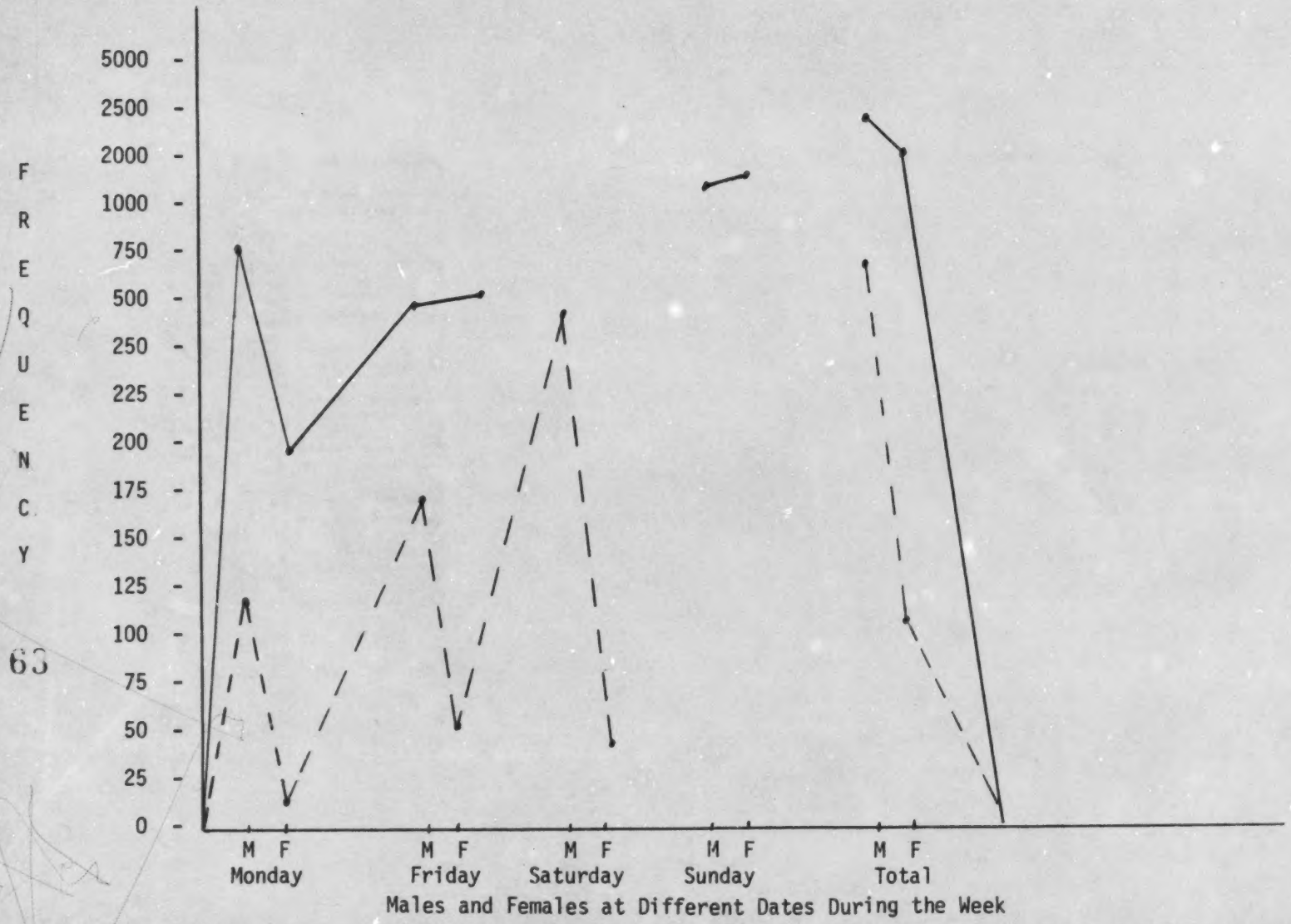


Table 18

TABLE OF STATISTICS COMPARING REEQUENCY OF SEXUALLY INAPPROPRIATE BEHAVIORS BETWEEN INTERVENTION AND NON-INTERVENTION

Males	Females
Intervention Mean = 93.7	Intervention Mean = 22.5
Non-Intervention Mean = 349.4	Non-Intervention Mean = 250.7
$\overline{D}$ = 255.7	$\overline{D}$ = 228.2
t = 4.618	t = 1.952
N = 10	N = 10
critical value at .05 = 1.833	critical value at .05 = 1.833

Total Distribution

Intervention Mean = 58.1

Non-Intervention Mean = 300.05

$\overline{D}$ = 241.95

t = 3.85

N = 20

critical value at .05 = 1.725

4. Evidence of Systematic and Responsible Analysis

The administration of instrumentation in the Project is not difficult. None of the assessments or checklists require more than simple training or directions. Since the Project Director and Project Instructor were responsible for administration in the previous year and since instrumentation has not changed significantly, evidence for responsible assessment is implicit. The exception to this is the measurement of behavioral checklists. The staff assistant was included in the administration process after careful training by the Project Instructor.

Data for Goal V were verified through dual observer reliability measures. The results, on Table 2, indicate a high degree of reliability with an overall r = 90%. No reliability score fell below 80%.

Verification of Goals I, III, IV and V occurred through direct outside evaluation and inspection by this evaluator with respect to resource provision, instrument assessment and data collection procedures. Specific time tables were agreed upon for direct and immediate receipt of data from primary Project personnel. A total of five observational visits from this evaluator were completed. On each occasion, Project personnel consistently exceeded Project and evaluator directives.

Data analysis was the responsibility of primary evaluator, Darryl Zitzow, Northern State College and secondary evaluator, Dr. Robert Zimmerman, Northern State College. Data was analyzed through use of computer following the SPSS and LERTAP packages. General goals III, IV and V were analyzed in this manner with subsequent measures of central tendency, chi squares and t scores (when appropriate) as the primary statistics used. Data from general goal I

was verified through inspection. Data from general goal II was not analyzed.

5. Unanticipated Outcomes of Significance

This data has been shared in part 5 Section A, Purpose and Objectives. For clarification, selected changes will be restated. Major revisions in the visual materials presented in the cognitive programming (General Goal 1) were required. A focus on positive alternate activities became the primary alternative to behavior modification (General Goal 2) when "overcorrection" was deemed unsuitable. Additionally, the focus of programming for lower functioning students shifted to "functional needs" instead of cognitive or affective needs. Finally, concern became readily apparent to Project personnel regarding the need for developed programming addressing student sexual "exploitation" once placed outside the Redfield State Hospital and School.

II. EXPORTABILITY

A. Educational Significance

The issue of human sexuality for the mentally retarded is both an extremely pervasive and frustrating concern for parents and educators of retarded persons. It is most frequently the "unmentionable" reason for either hiding retarded persons from the "normal" population or for a prospective employer's subtle refusal to consider a retarded person for employment. Any successful educational effort designed for mainstreaming and "normalizing" life must effectively prepare retarded individuals in this basic behavioral need area.

Evidence of the pervasiveness of educators working with the mentally retarded and their registered concern for this issue is illustrated in the wealth of persons and locations voluntarily participating in in-servicing already supplied by Project Personnel. (See comments of in-service participants and Tables 9 and 10). Several educators at other agencies have requested additional training and curriculum materials as soon as Project personnel have completed exportability concerns.

The program, as it presently is designed, attempts to respond to the special learning needs and understanding levels of the educably retarded. Inherent in programming is a "flexibility of individualization", that attempts to approach the learner in his/her respective milieu at his/her learning level. This feature enhances the exportability to agencies with varied populations in the broad-based definition of "retarded". The evidence of educational significance for other agencies is implicit in the levels of significant change in students and staff as illustrated in the Results section of this document.

B. Target Population

The target population included resident students of the Redfield State Hospital and School between the ages of five and twenty-one. Additionally, the students were designated as suitable for living outside the facilities of the Redfield State Hospital and School at some future date. This designation indicates both an educable level of retardation and behavioral strength that enhances the students' potential for self-sufficiency. These were also the residents with the destined "higher visibility" to normal population environments.

While this designation indicates the preferred target population, program flexibility enhances the possibility for similar programming with both more and less severely retarded students. Evidence for this is found in the recent success Project Personnel found in working in the Men's Unit at the Redfield State Hospital and School. These individuals possess a broader range of capabilities than original program participants found in the Educational Unit.

C. Staffing and Training Requirements

It is strongly recommended that one staff person be designated to assume the responsibility of coordinating the implementation and instructional use of the Human Sexuality materials into the adopting school or adjustment training centers.

The responsible staff person(s) must be empathetic regarding both the issues of retardation and human sexuality. This point was emphasized by Donald Cannady at his presentation, when he stated, "The person who would be a vehicle of positive sex education must perceive our social situation, face the reality of it, and therefore be committed to the need for a special kind of sex education that goes beyond and sometimes contradicts what we experience in society at large.

The teacher must also be sensitive to and understanding of the full place and meaning which sexuality has in human life. This, includes alot more than the physical and biological focus which continues to dominate sex education . . . We are talking about the vast psychological and spiritual realities which we cannot afford to neglect in relation to ourselves and the retardate."

It is recommended that the responsible staff attend a minimum of two-eight hour workshops geared toward sexuality of the handicapped. Through the in-service, the educator should become knowledgeable about the basic subject matter and characteristics of the students. The training will also help the instructor come to terms with his/her own sexuality and better understand terms, both technical and slang, associated with the language of sex. The staff person(s) would in turn be responsible for providing short-term orientation workshops. A minimum of four hours is required for in-service for supportive and/or direct care staff, because the entire staff, without exception, must have some education, training or guidance in dealing with the sexuality of the mentally retarded.

D. Materials, Equipment, and Facilities

A human sexuality curriculum geared toward the severely handicapped population is required. At the present time, the majority of the materials available are geared for the verbal and educable population. Thus, the responsible staff person should preview all materials before final purchase to assure appropriateness for programming. (Most residents tend to be non-verbal.) The purchased curriculum should include pre and post test assessment instruments, goals, objectives, lesson plans, activities and slide and filmstrip presentations.

Through research, the Redfield State Hospital and School Project Staff has developed a bibliography of available and appropriate resource books, curriculums, materials and visual aids relevant to this population.

Because most students are non-verbal and severely handicapped, both software and hardware for visual presentation are required. The materials must be specific and simple and at a level where students may be expected to develop appropriate behavioral responses. The materials must always begin with personal identity and self-care and move outward to embrace a broader scope of maleness or femaleness. Concrete items such as male and female dolls were utilized. Teacher-made materials included paper representational figures, with removeable parts, body part puzzles and illustrations. Photos of actual environments were also included as learning materials.

Visual aids are a critical aspect of the program. Hardware materials, such as projectors, record players, video tape equipment and a 35 mm camera for slides and pictures not only benefit the students, but the staff during in-service training. Video tape equipment is an extremely useful tool for teaching concepts such as appropriate ways to greet strangers and friends as well as how to avoid exploitation. Finally, the video tape is also an acceptable means of demonstrating actual class sessions for staff in-service.

A special room facility is required for group informal and formal sessions and to accomodate individual and co-ed classes. All hard and software materials must be located in the Human Sexuality Classroom, assuring student confidentiality and avoiding misconceptions of visual materials.

E. Minimum Adoption Requirements

The components necessary for minimum adoption are:

1. Project director and a staff instructor which could be the same person, if the total students involved numbered less than twenty. A staff aide

would be essential if the students involved exceeded twenty. It should be a requirement that these staff persons receive a minimum of sixteen hours in-service training in Human Sexuality for the Mentally Handicapped. Staff from the Redfield State Hospital and School would be available to conduct the necessary in-service on a cost-recovery basis.

2. A Human Sexuality curriculum for the mentally retarded designed for the specific population at the adopting agency.
3. A library of visual materials for instructional purposes. These may be commercially designed or prepared by the project instructor. A library of resource materials, such as books, filmstrips, and slide presentations are indispensable items for providing staff and parents with background knowledge of sexuality. The Redfield State Hospital and School Project Staff has a bibliography available for dissemination.
4. Audio-visual equipment available at the project site should be utilized as instructional tools for actual programming and in-service. If the equipment is not available, the effectiveness of the in-service would be diminished.
5. Instruments of cognitive and behavioral evaluation for both staff and students is required. These can be obtained from commercial resources or from Project Staff.

F. Replication Costs

The major replication costs would be for in-service training. The cost would vary and remain dependent on adopting agency means and needs. The following procedures could be considered in obtaining the necessary in-service: 1) visiting a site that does provide the training, or 2) requesting the services of the training staff on-site. The Redfield State Hospital and School Project Staff would be availalbe to provide either of the above services. Should the decision

be made to have the Redfield Project Staff visit the site, arrangements could be made on a cost-recovery basis. Although the cost of in-service training will vary greatly, a minimum of $1,000 should be budgeted. The cost of the initial software library and resource books would be approximately $100. The cost of the audio-visual equipment will vary greatly, depending on what is already available at the project site.

The following project developed curriculum and visual aids are available for the cost of reproduction:

1. Human Sexuality Resource Bibliography--no charge.
2. A Teacher's Manual - containing the following: characteristics of the learner, teacher and subject matter; curriculum designed for the severely handicapped population; lesson plans; activities; goals and objectives. All of the above are easily adaptable, depending on the appropriateness of the population--total cost $15.00.
3. Slide Presentations to Supplement the Curriculum (Hygiene Programs) - $35.00.
4. Assessment Instruments (includes photo cards) - $15.00.
5. Behavioral Evaluation Instruments and In-service Assessments - no charge.
6. Visual Instructional Materials - pictures which may be copied. (Useful when teaching public/private and appropriate/inappropriate concepts) - $5.00.

G. Special Problems

There were no problems deemed insurmountable by Project Staff. Therefore, the generalization to other adopting agencies appears highly possible with a minimum of difficulty. Workable solutions to anticipated problems are in Part II "unanticipated or deleted objectives". For purposes of clarification,

three major areas of anticipated problems will be mentioned. 1) The topic of "human sexuality for the mentally retarded" is highly controversial. Careful consideration should be given to potential staff, parents or students that might find the subject highly objectionable. The best solution is to move slowly, constantly responding to the level of the individuals receiving staff information. Staff persons must be genuine, honest and open and possess skills at clearly identifying program purposes and remain open to concerns of their audience. 2) State legislation and local agency rules exist relevant to the topic of both human sexuality and appropriate behavior modification techniques. Project staff should be knowledgeable regarding the rules and legislation and prepare program objectives and methods consistent with those same rules and legislation. 3) Retarded persons exist with unique cognitive, affective and behavioral levels. Program objectives and teaching styles must be sensitive to the learning levels of student participants and modified to meet individual student needs. For example, if more visual stimuli are necessary for a student to grasp a concept, provide more visual stimuli. If more frequent repetition of new concepts are required by a student, provide more frequent exposure. The purpose of the programming must never be forgotten. The purpose is designed to enhance the knowledge and behaviors of students with respect to human sexuality and appropriate sexual behaviors. Nothing else should take precedence.

APPENDIX A

HUMAN SEXUALITY AWARENESS

ASSESSMENT INSTRUMENT

	PRE	MID	POST
PICTURE #1 (Fully clothed teen girl and teen boy) PURPOSE: To assess the client's awareness of gender and self-image.			
1.Ask for picture of the boy	_____	_____	_____
2.Ask for picture of the girl	_____	_____	_____
3.Ask for picture that could be you.	_____	_____	_____
OBSERVATIONS:			
PICTURE #2 (Teen boy and teen girl dressed in underclothing, paper dolls and clothing.) PURPOSE: To assess the client's knowledge of body awareness			
4.Ask for picture of the girl	_____	_____	_____
5.Ask for picture of the boy	_____	_____	_____
Ask the client to identify by pointing to, the following basic body parts:			
6.Eye	_____	_____	_____
7.Mouth	_____	_____	_____
8.Shoulder	_____	_____	_____
9.Finger	_____	_____	_____
10.Leg	_____	_____	_____
11.Ears	_____	_____	_____
12.Nose	_____	_____	_____
13.Teeth	_____	_____	_____
14.Foot	_____	_____	_____

	PRE	MID	POST
15. Neck	_____	_____	_____
16. Knee	_____	_____	_____
17. Hand	_____	_____	_____
18. Ankle	_____	_____	_____
19. Arm	_____	_____	_____
20. Tongue	_____	_____	_____
21. Ask the client to dress the boy paper doll	_____	_____	_____
22. Ask the client to dress the girl paper doll	_____	_____	_____

OBSERVATIONS:

PICTURE #3
(Fully clothed male and female) (Adult)
PURPOSE: To assess the client's awareness of sexual identity.

23. Ask for picture of the man.	_____	_____	_____
24. Ask for picture of the woman	_____	_____	_____
25. Ask for picture of father	_____	_____	_____
26. Ask for picture of mother	_____	_____	_____

OBSERVATIONS:

PICTURE #4
(Nude male and female, paper dolls and underclothing) (Adult)
PURPOSE: To assess the client's awareness of sexual body parts

27. Ask for picture of man	_____	_____	_____
28. Ask for picture of woman	_____	_____	_____

	PRE	MID	POST
Ask the client to identify, by pointing to, the following:			
29. Stomach	_____	_____	_____
30. Back	_____	_____	_____
31. Breast	_____	_____	_____
32. Nipple	_____	_____	_____
33. Buttocks	_____	_____	_____
34. Rectum	_____	_____	_____
35. Vagina	_____	_____	_____
36. Pubic hair	_____	_____	_____
37. Hips	_____	_____	_____
38. Navel	_____	_____	_____
39. Chest	_____	_____	_____
40. Testicles	_____	_____	_____
OBSERVATIONS:			

PICTURE #5
(Given private and public behaviors)
PURPOSE: To assess the client's awareness of appropriate behavior.

41. Ask for picture of couple holding hands.	_____	_____	_____
42. Ask for picture of couple hugging each other	_____	_____	_____
43. Ask for picture of couple having intercourse	_____	_____	_____
44. Ask for picture of couple talking to each other	_____	_____	_____
OBSERVATIONS:			

	PRE	MID	POST
PICTURE #6 (Males and females; urination and bowel movements) PURPOSE: To assess the client's awareness of body functions.			
45. Ask for picture of male as he urinates	_____	_____	_____
46. Ask for picture of female as she urinates	_____	_____	_____
47. Ask for picture of male as he has a bowel movement	_____	_____	_____
48. Ask for picture of female as she has a bowel movement	_____	_____	_____
OBSERVATIONS:			
PICTURE #7 (Male and female, sanitary napkin) PURPOSE: To assess the client's awareness of menstruation			
49. Ask for picture of sanitary napkin.	_____	_____	_____
50. Ask for picture of the one who would use the napkin.	_____	_____	_____
51. Ask the client to point to where the napkin is worn.	_____	_____	_____
OBSERVATIONS:			
PICTURE #8 (Male masturbation, environments). PURPOSE: To assess the client's awareness of masturbation and the appropriate environment.			
52. Ask for picture of boy masturbating.	_____	_____	_____
53. Ask for picture of where it is OK to masturbate.	_____	_____	_____
OBSERVATIONS:			

	PRE	MID	POST
PICTURE #9 (Female masturbation, environments) PURPOSE: To assess the client's awareness of masturbation and the appropriate environments.			
54. Ask for picture of girl masturbating.	_____	_____	_____
55. Ask for picture of where it is OK to masturbate	_____	_____	_____
OBSERVATIONS:			
PICTURE #10 (Pregnancy) PURPOSE: To assess the client's awareness of pregnancy.			
56. Ask for picture of woman who looks like she is going to have a baby.	_____	_____	_____
OBSERVATIONS:			
PICTURE #11 (Sexual behaviors) PURPOSE: To assess the client's awareness of sexual behaviors			
57. Ask for picture of the baby	_____	_____	_____
58. Ask for picture of how a baby is made	_____	_____	_____
OBSERVATIONS:			
PICTURE #12 (Puberty) PURPOSE: To assess the client's awareness of physical changes that occur during puberty (female)			
59. Ask for picture of the little girl	_____	_____	_____

	PRE	MID	POST
60. Ask for picture of the woman	_____	_____	_____
61. Ask for picture of the school girl.	_____	_____	_____

OBSERVATIONS:

PICTURE #13
(Puberty)
PURPOSE: To assess the client's awareness of physical changes that occur during puberty (male)

62. Ask for picture of the little boy	_____	_____	_____
63. Ask for picture of the man	_____	_____	_____
64. Ask for picture of the school boy	_____	_____	_____

OBSERVATIONS:

APPENDIX B

RESIDENTS NAME: _____

OBSERVERS NAME: _____ DORM: _____

DATE	LOCATION	TIME	DURATION	BEHAVIOR	POSITIVE REINFORCEMENT	OCCURRENCES BEFORE	OCCURRENCES DURING	OCCURRENCES AFTER
	83							84

APPENDIX C

ATTITUDES TOWARD THE SEXUAL BEHAVIOR OF THE MENTALLY RETARDED

1 = Strongly Agree 2 = Agree 3 = Uncertain
4 = Disagree 5 = Strongly Disagree (please circle your answer below).

1. Sexuality for the mentally handicapped begins at birth and continues until death, just the same as for non-handicapped.

   1 2 3 4 5

2. Persons who are mentally handicapped must be helped to mature sexually in ways appropriate to their level of functioning.

   1 2 3 4 5

3. Introducing the mentally handicapped to sex education will stimulate or motivate the students to sexual activity.

   1 2 3 4 5

4. Mentally handicapped persons, whether institutionalized or not, have a right to sexual expression.

   1 2 3 4 5

5. It is better to wait until the mentally handicapped experiences menstruation or wet dreams before discussing these changes that occur during puberty.

   1 2 3 4 5

6. Society in general cannot cope with the idea of the mentally handicapped having the same emotional needs and desires as the rest of the population.

   1 2 3 4 5

7. Many parents feel uncomfortable or in fact are unable to discuss sexuality with their children.

   1 2 3 4 5

8. If the mentally handicapped can be taught the bathroom is the appropriate place to relief themselves; they can also be taught masturbation, like all other sexual behavior, should be done in private.

   1 2 3 4 5

9. Each individual has the right to accept or reject particular forms of sexual expression on the basis of personal preference.

   1 2 3 4 5

10. Masturbation is a normal expression of sexuality at any time of life when it serves as a healthy alternative to direct sexual activity.

    1 2 3 4 5

11. The mentally handicapped do not need to know many facts about sex; the information that needs to be imparted can be given in a few minutes, then repeated at different levels and different times.

1 2 3 4 5

12. Sexuality includes much more than facts about reproduction, sexual intercourse, or the differences between male and female.

1 2 3 4 5

13. Thoughts about, and isolated experiences with homosexuality, do not make one a homosexual.

1 2 3 4 5

14. Staff and/or parents should swamp the mentally handicapped person with love and affect on to "make-up" for some of the other pleasures they are missing.

1 2 3 4 5

15. Because of their lack of good judgement, desire to please and habit of doing whatever is asked of them, mentally handicapped persons can be taken advantage of sexually.

1 2 3 4 5

16. Abortion should be an alternative for a mentally handicapped female if she decides that she does not want a child.

1 2 3 4 5

17. The mentally handicapped have the right to all the knowledge about sexuality they can comprehend. This includes the right to understand the responsibilities involved in all sexual behavior, in marriage, and parenting.

1 2 3 4 5

18. Sterilization is the best means of birth control for both male and female mentally handicapped persons.

1 2 3 4 5

19. Mentally handicapped persons are incapable of being good parents, therefore they should be sterilized.

1 2 3 4 5

20. If mentally handicapped reproduce, the baby will be retarded.

1 2 3 4 5

21. Mentally handicapped persons should be given the choice of marriage.

1 2 3 4 5

22. Sex education and birth control materials should be made available to mentally handicapped persons who live in the community.

1 2 3 4 5

23. There can be no successful sex education program unless the direct care staff are consistent in attitude and action.

1 2 3 4 5

APPENDIX D

BEHAVIOR CLIMATE STUDY OF SEXUAL BEHAVIOR

REDFIELD STATE HOSPITAL AND SCHOOL

Staff person(s) will observe the behavior for five minutes every thirty minutes from 7:00 a.m. to 7:00 p.m. There must be 24 five minute observations for each day (seven days total) beginning February 17, 1981 and ending February 23, 1981.

Inappropriate behaviors operationally defined as: Hands in pants - front or back, hands near or on the genital area in or out of clothes, disrobing, stimulation of the genital area via rocking on the floor - hands between legs, etc., and hands touching sexual body parts of others.

Activities for the Control Group: play dough, puzzles, puppets, beads, regular school programming, art activities and etc. A staff person is to actively involve the client in an activity during the five minute observation period, such as helping them with cutting, stringing beads and etc.

Non-control Group: Observe the client's behavior as it occurs each of the five minutes, every half hour, without involving them in any specific activity.

To insure observer reliability, Eldena will check each instructor a minimum of two times during the study. Please indicate on your check sheet, observer reliability check.

BEHAVIORAL CLIMATE STUDY OF SEXUAL BEHAVIOR
DATA COLLECTION SHEET
HUMAN SEXUALITY FOR THE MENTALLY RETARDED
REDFIELD STATE HOSPITAL AND SCHOOL - CONTROL GROUP

DATE	ACTIVITY UTILIZED	BEHAVIOR & FREQUENCY	TIME	AREA

COMMENTS:

NAME: _____ OBSERVER: _____

BEHAVIORAL CLIMATE STUDY OF SEXUAL BEHAVIOR
DATA COLLECTION SHEET
HUMAN SEXUALITY FOR THE MENTALLY RETARDED
REDFIELD STATE HOSPITAL AND SCHOOL - NON-CONTROL GROUP

DATE	BEHAVIOR	FREQUENCY	TIME	AREA

COMMENTS:

NAME: _____ OBSERVER: _____